Transportation Tracking Number (TTN)
Joint Deployment Distribution Conference
3-5 October 2007

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Transportation Tracking Number (TTN) Why Do We Need To Change?

DEPLOYMENT SYSTEMS DO NOT SUPPORT JOINT INFORMATION REQUIREMENTS NEEDED FOR COMMAND & CONTROL

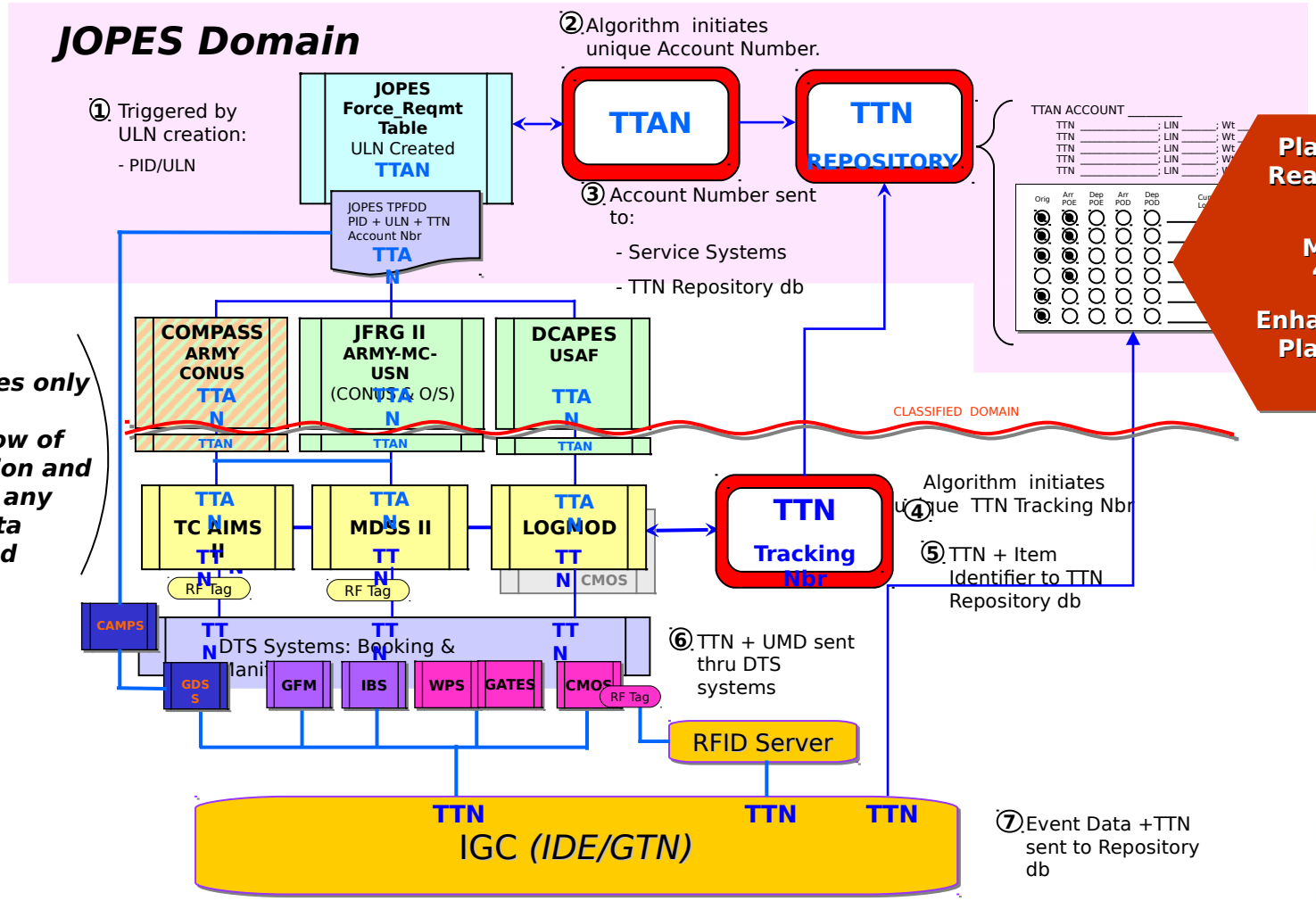
- Force movement tracking requires fusing TCN to OPLAN+ULN
  - ULN is not unique in JOPES, but OPLAN cannot be stored in UNCLAS systems
  - ULN is not in Army Transportation Control Number
  - Mobility TCN is not unique
  - ULN can only be connected to OPLAN on contingency/exercise air missions; not at all for surface and sea
- No system view of closure by any form of force aggregation
  - SMS and JOPES S&M use inference based upon arrival of scheduled lift asset at POD
  - No ITV of force movements beyond POD
- No reconciliation possible between Level 4 JOPES requirement, Level 2 scheduling data, and Level 6 execution data

TTN R&D Project

Objective:

The Distribution Process Owner (DPO) and Joint Deployment Process Owner (JDPO) will seek to improve the quality of command and control (C2) information for unit movements by creating a *unique requirement ID* supporting the implementation of a *unique transportation tracking number (TTN).*

Holistic Approach for Deployment Architecture



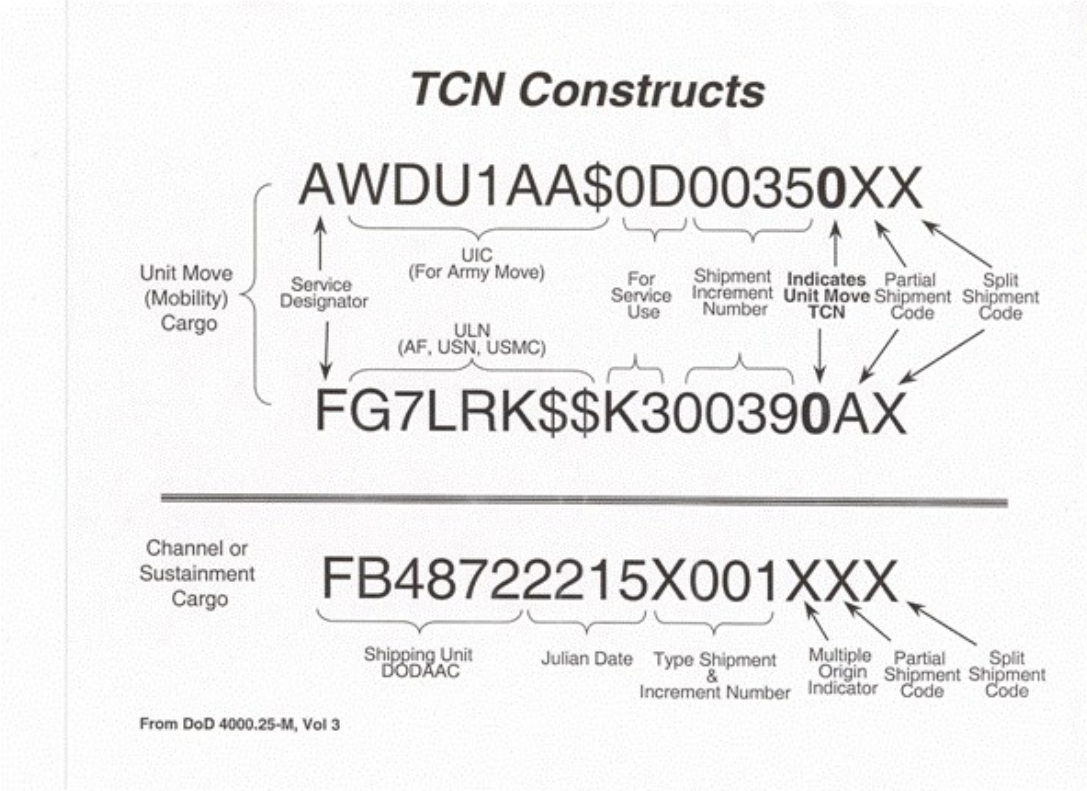
Other advantages: Track Multiple OPLAN Requirements on Same Asset

- May Influence Better Financial Processes
- Take JOPES to the Next Level

Current Transportation Control Number

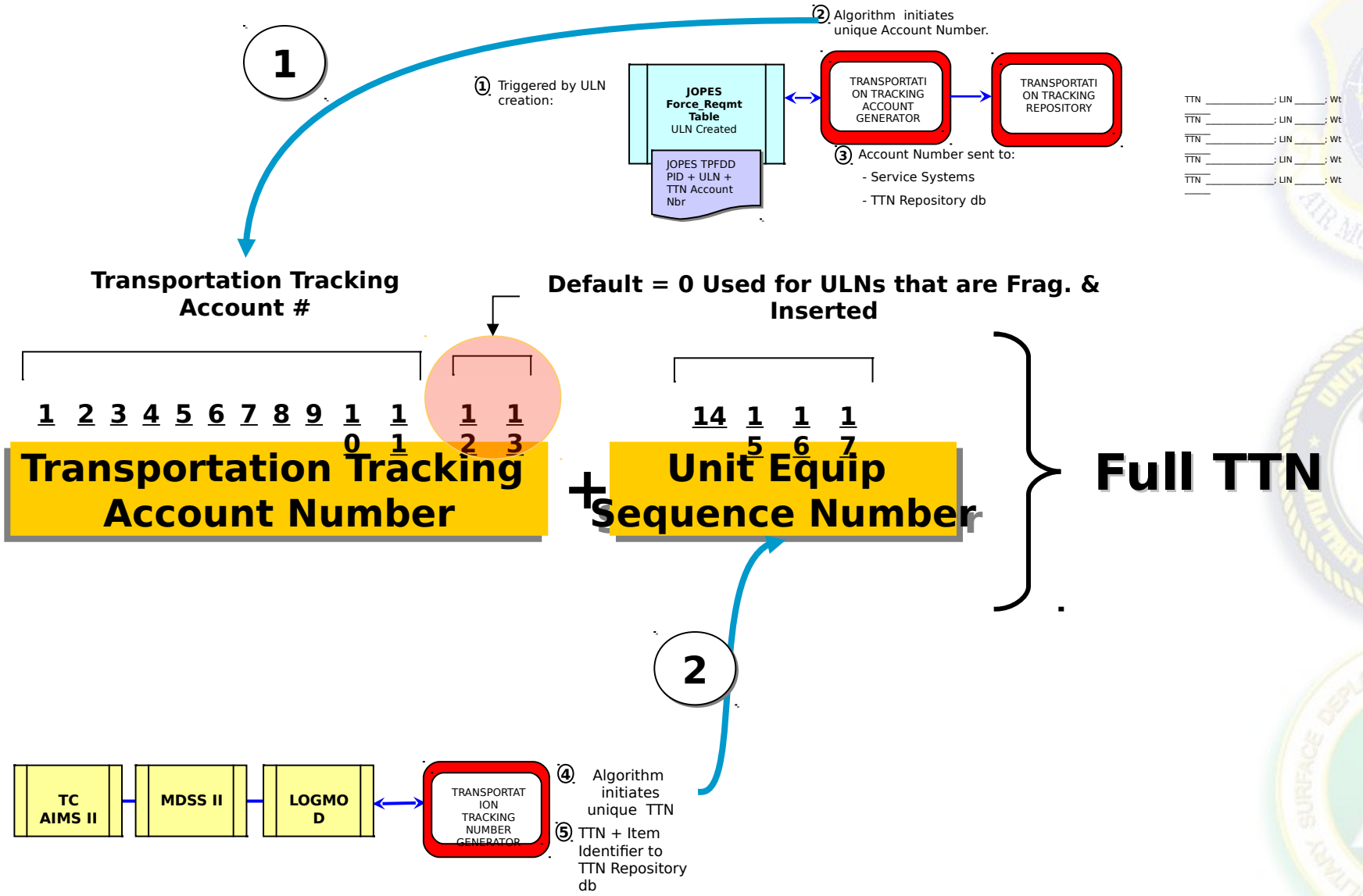
Mobility TCN is not unique because ULNs and UICs are not unique

If T ken

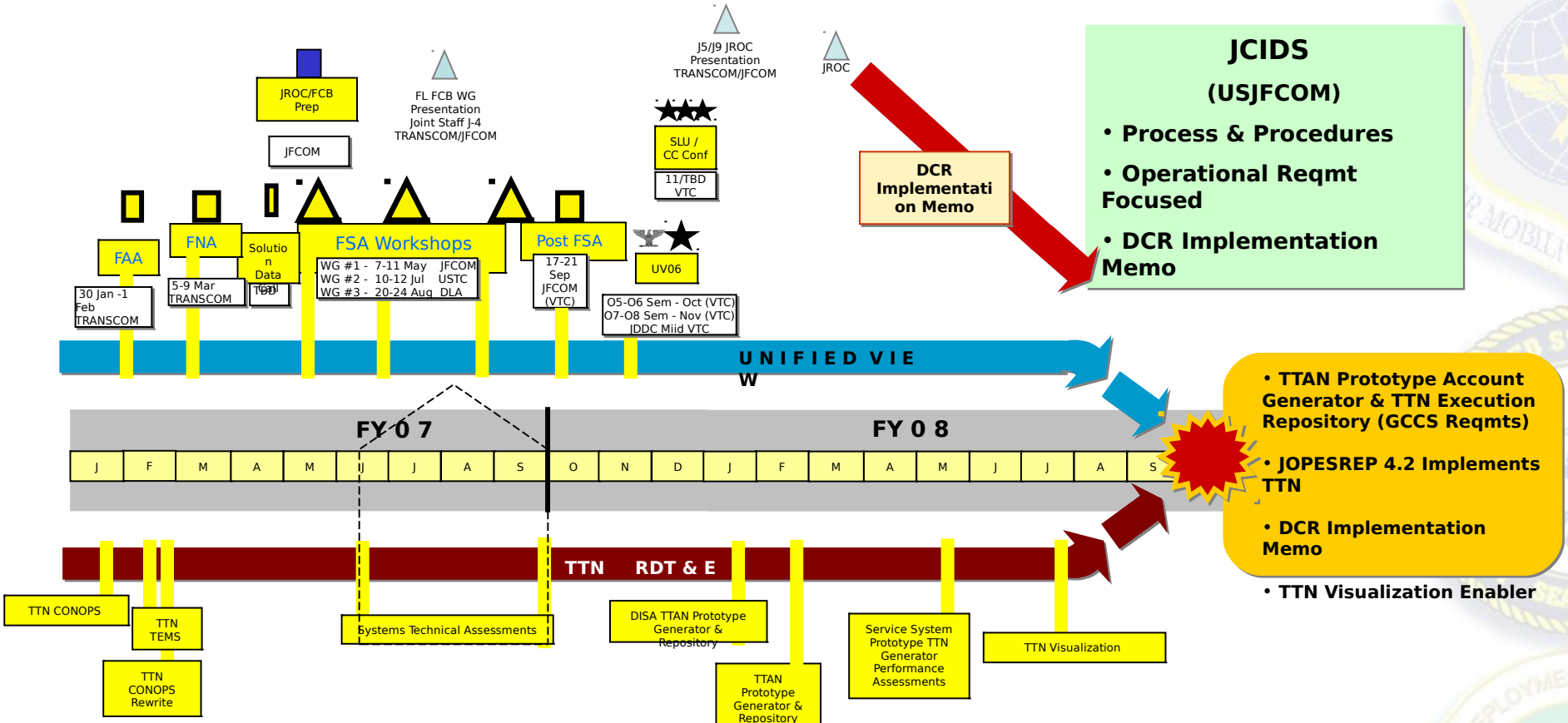


Sustainment TCN is unique because of embedded Julian date

Building a TTN


1
2 Algorithm initiates unique Account Number.
1 Triggered by ULN creation:
JOPES Force_Reqmt Table
ULN Created
JOPES TPFDD PID + ULN + TTN Account Nbr
TRANSPORTATION TRACKING ACCOUNT GENERATOR
TRANSPORTATION TRACKING REPOSITORY
3 Account Number sent to:
- Service Systems
- TTN Repository db
TTN _____; LIN _____; Wt _____
Transportation Tracking Account #
Default = 0 Used for ULNs that are Frag. & Inserted
1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17
Transportation Tracking Account Number
+
Unit Equip Sequence Number
Full TTN
2
TC AIMS II
MDSS II
LOGMOD
TRANSPORTATION TRACKING NUMBER GENERATOR
4 Algorithm initiates unique TTN
5 TTN + Item Identifier to TTN Repository db

TTN – Dual Track Schedule



JCIDS
(USJFCOM)

- **Process & Procedures**
- **Operational Reqmt Focused**
- **DCR Implementation Memo**

- **TTAN Prototype Account Generator & TTN Execution Repository (GCCS Reqmts)**
- **JOPESREP 4.2 Implements TTN**
- **DCR Implementation Memo**
- **TTN Visualization Enabler**

FY07 TTN RDT&E
(USTRANSCOM)

- **Individual Technical Assessments**
- **System Design Implications**

FY08 TTN RDT&E
(USTRANSCOM)

- **TTAN Prototype Account Generator & TTN Execution Repository**
- **Enterprise-wide Assessment**
- **Visualization Tool Proof of**

Assessment Status

System	TTN Role	Comments
DISA/JOPES	Prototype Account Generator/Repository	Received
COMPASS	Pass Through System	Received
TC-AIMS II	Prototype TTN tracking number generator software	To Be Completed NLT Sept 07
MDSS II	Prototype TTN tracking number generator software	Received
JFRG II	Pass Through System	Received
DCAPES	Pass Through System	To Be Completed NLT Oct 07
CMOS	Pass Through System	???
LOGMOD	Prototype TTN tracking number generator software	Received

Transportation Systems

IBS	Pass Through System	Received
GFM	Pass Through System	Received
GATES	Pass Through System	Received
CAMPS	Pass Through System	Received
GDSS	Pass Through System	Received
GTN/IGC	Pass Through System	Received

TTN Near Term Schedule

10-11 October **DISA (At USTRANSCOM)**

Objectives: Prototype Status/Repository Discussion/TTN Software Development/Marine Interface/consolidated position/approach

17-18 October **Joint Technical Exchange Meeting (TEM)**

(at SRA, 4300 Fair Lakes Ct, Fairfax, VA)

Objectives: FY08 Prototype Development (cost determination), Repository Interface, TTN Generation Software, Holistic Approach

FY08 POA&M

Oct10-11	TEM at USTRANSCOM with DISA
Oct 17-18	TEM w/System Representatives (SRA, Fairfax, Va)
Nov 07	Draft DCR Initial Coord (USTC/DLA/JFCOM)
Dec 07	Staffing DCR in KMDS (Planner Level)
Jan 08	FL FCB WG (info brief)
Jan 08	C2 FCB WG
Feb 08	Staffing DCR in KMDS (FO/GO)
Mar 08	C2 FCB (Decision)
Apr 08	Joint Capabilities Board
May 08	JROC Submission

Take-Away

- JCIDS Process Ahead Of Schedule
- Technical Assessments In Progress
- FY 08 Prototype Development & Testing
  - DISA Account Generator & Repository
- Expect JROC Implementation Memorandum For TTN
- Intended Implementation & Fielding Beginning in FY 09

Questions

Back-up

TTN Value: Plan vs. Actual

Enabling Capability Closure

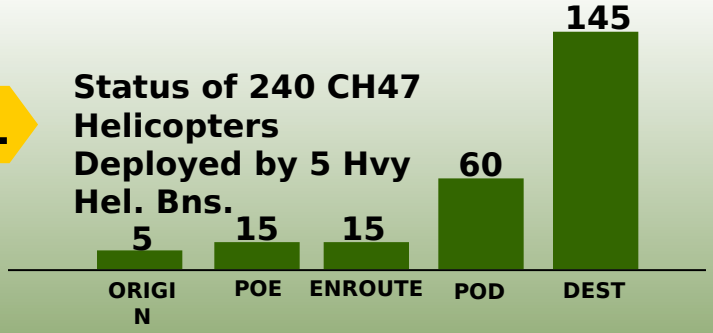
No longer tied to "weight-based" closure in JOPES…

…TTN detail establishes discrete, reliable item level transportation closure to JOPES.

TTN is foundational to "plan vs. actual", as such provides the detail data that opens the possibility for understanding "capability" closure. As an example:

ACTUAL

Status of 240 CH47 Helicopters Deployed by 5 Hvy Hel. Bns.



PLAN

OPLAN Requirement: 5 Heavy Helicopter Battalions

LAD: Today

Old way = 1639 tons closed (145 x 11.3 tons)…so what?

TTN provides = 145 CH47 at Dest

= 60 at POD

= 35 yet to arrive

TTN Data Enables New Possibilities

CH47D

Cargo: 28K

Troops: 33

Capacity → **5 Bns x 48 CH47s = 240 CH47s x 14 tons = 672 tons (or 1584 troops)**

Max Speed: 196 mph

Range: 1259 Miles

CH47 Vertical Lift Capability in theater is 403 tons or 950 troops; (60%) capability closed.

TTN – Why Not Just Fix the Unit Move TCN?

Long Standing Argument

The TCN Effort

- *Must remove human from TCN generation*
- *Must be machine created with locks in each service system*
- *Must prevent duplication in all systems*
- *TCNs are never OPLAN unique*
- *Never improves JOPES view of closure beyond Level 4 weights*
- *Must maintain current "air" SMINT interface to JOPES, plus build a "surface" SMINT*
- *Offers no value to FTN & Global Force Management efforts*
- *Has no potential to affect DTS financial world*
- *Does not resolve multiple OPLAN cargo on same mission*

The TTN Effort

- *No human in TTN generation*
- *Is machine generated by/for machines*
- *Is unalterable*
- *Never duplicated across systems*
- *TTNs are OPLAN unique*
- *Provides JOPES view of closure at item Level 6*
- *Allows for "capability-based" closure assessments*
- *Provides accurate foundation for re-planning*
- *Enhances strategic asset scheduling for theater airlift*
- *Ultimately removes the need for any SMINT interface to JOPES*
- *Expands value to FTN & Global Force Management efforts*
- *Has potential to affect DTS financial world*
- *Does resolve multiple OPLAN cargo on*

TTN - Can this work for Sustainment?

The Sustainment Problem…

…is Different from the Unit Move Problem

Unit Move ITV problem is that the primary TCN data used across all the systems loses its uniqueness; e.g. TCN created wrong, duplicate TCNs used, op

Possibility of data returning to JOPES

- ***Worst we've seen – 27%***
- ***Best we've seen – 80%***
- ***Currently – 65%***

We can not control the use or abuse of the TCN

Sustainment TCN retains its uniqueness. The ITV problem is the loss of shipment visibility when aggregated through multiple levels; e.g. requisitions numbers aggregated into a shipment TCN, that is then aggregated again into a higher sh

An internal "supply" tracking number is coming with the UID

Passive RF Tags may provide more opportunities for data integrity through aggregation processes

New EDI 856 offers more promise

The TTN Tracking Number concept offers the potential to help every aspect of distribution throughout the DPO